

WHAT IS CLAIMED IS:

1. A communication apparatus using Bluetooth wireless communication, comprising:

5 a Bluetooth wireless terminal having an ID (Identification) key for transmitting a communication request signal to a wired phone by means of a first Bluetooth module and a Bluetooth communication process, and for requesting a communication service from the wired phone by means of the Bluetooth module upon receiving the ID key; and

10 the wired phone having a second Bluetooth module, and connecting the Bluetooth wireless terminal with a wired network upon receiving the communication request signal from the Bluetooth wireless terminal.

2. The apparatus as set forth in claim 1, wherein the Bluetooth wireless terminal includes

15 a key entry unit having a prescribed key corresponding to an ID number used for requesting a communication service from the wired phone; and

a controller for transmitting wired communication request signal to the wired phone via the first Bluetooth module when the key entry unit receives the ID number from a user, and for transmitting a user-entered phone number to the wired phone via the first Bluetooth module.

20 3. The apparatus as set forth in claim 1, wherein the wired phone includes

a key entry unit for entering or deleting a Bluetooth ID of the Bluetooth

wireless terminal;

a memory for storing the Bluetooth ID of the Bluetooth wireless terminal;

a display for displaying entry and deletion information of the Bluetooth ID and status information of the Bluetooth wireless terminal, said status information

5 being stored in the memory; and

a controller for connecting, upon receiving the communication request signal from the Bluetooth wireless terminal, the Bluetooth wireless terminal with the wired network to provide a communication service when information of the Bluetooth wireless terminal sending the communication request signal is pre-stored in the
10 memory.

4. The apparatus as set forth in claim 3, wherein the key entry unit includes an ID entry button for entering the Bluetooth ID of the Bluetooth wireless terminal;

an ID deletion button for deleting the Bluetooth ID stored in the memory;

15 and

an English-conversion button for entering the Bluetooth ID, the Bluetooth ID being composed of a combination of English letters and numerals.

5. The apparatus as set forth in claim 3, wherein the display includes

a standby state display for indicating a communication standby state when
20 the Bluetooth wireless terminal gains access to the wired phone; and

a line-busy state display for indicating that the Bluetooth wireless terminal is receiving a communication service using the wired phone.

6. The apparatus as set forth in claim 1, wherein the communication request signal is a wired communication request signal, and
wherein the communication service is a wired communication service.

7. A communication method using Bluetooth wireless communication in a
5 communication system comprised of a Bluetooth wireless terminal having a Bluetooth module, a wired phone, and a wired network, said method for controlling the Bluetooth wireless terminal to receive a communication service, comprising the steps of:

allowing a user to register a Bluetooth ID of the Bluetooth wireless terminal
10 in the wired phone; and

upon receiving a wired communication request signal from the Bluetooth wireless terminal, determining, using the wired phone, whether the Bluetooth wireless terminal is previously registered, and connecting the Bluetooth wireless terminal with the wired network if the Bluetooth wireless terminal is previously
15 registered.

8. The method as set forth in claim 7, further comprising the step of:

informing another Bluetooth wireless terminal, using the wired phone, of a disabled call connection state, if the other Bluetooth wireless terminal sends a new communication request signal prior to terminating a call connection state of the
20 currently connected Bluetooth wireless terminal.

9. The method as set forth in claim 8, wherein the communication service is a wired communication service, and

wherein the communication request signal is a wired communication request signal.